Proposal Reviews

#50: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project Development

Cottonwood Creek Watershed Group

Research and Restoration Technical Panel Review

Sacramento Regional Review

#1

External Scientific Review

#2 #3

Prior Performance/Next Phase Funding

Environmental Compliance

Budget

Research and Restoration Technical Panel Review:

CALFED Bay-Delta 2002 ERP PSP Research and Restoration Technical Panel Review Form

Proposal Number: 50

Applicant Organization: Cottonwood Creek Watershed Group

Proposal Title: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project

Development

Review:

Please provide an overall evaluation summary rating:

Superior: outstanding in all respects;

<u>Above Average:</u> Quality proposal, medium or high regional value, and no significant administrative concerns;

<u>Adequate:</u> No serious deficiencies, no significant regional impediments, and no significant administrative concerns;

<u>Not Recommended:</u> Serious deficiencies, significant regional impediments or significant administrative concerns.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Superior	
-Above average	
-Adequate	The design methodology and proposed restoration techniques offer little hope that the project will be successful.
XNot recommended	

1. <u>Goals and Justification.</u> Does the proposal present a clear statement of goals, objectives and hypotheses? Does the proposal present a clear justification and conceptual model for the project?

The project goals and objectives are not clearly stated. Although the project type is given as "Implementation Pilot", it is really a design effort. Implementation is not included. The objectives cover the development of two demonstration projects." No attempt is made to develop hypotheses or how they might be tested. The project is justified by reference to CALFED's strategic plan. The authors seem not to have extensive knowledge of Cottonwood Creek or the need for restoration. The proposed two restoration sites seem reasonable. Since the project is design only, the scale of the project is reasonable.

2. <u>Likelihood of Success (Approach, Feasibility, Capabilities and Performance Measures).</u> Is the project likely to succeed based on the approach, feasibility and project team capabilities? Are the proposed performance measures adequate for measuring the project's success?

The proposed restoration techniques are standard, if not ineffective, practices. Nothing new is likely to come from this effort. The design tools, which are proposed, are appropriate but will be used to evaluate restoration techniques that do not meet the need. The design effort is feasible but not enough detail is provided on the potential design and monitoring programs. The resulting restoration will have a high probability of failure. The identified restoration techniques focus on stabilizing the stream banks and ignore grade control. No attempt is being made to understand the geomorphology of the project areas or the origin of the stream channel. Willow plantings will not accomplish what the authors intend: more natural hydrology and better wildlife habitat. The success of the project might be measured by the quality and timeliness of these products. The success of the restoration will depend on the means of implementation. This proposal seems not to be headed in the right direction.

3. <u>Outcomes and Products.</u> Will the project advance the state of scientific knowledge in general and/or make an important contribution to the state of knowledge of the Bay-Delta Watershed? For restoration proposals, is the project likely to contribute to ecosystem restoration or species recoveries in a significant way? Will the project produce products useful to decision-makers and scientists?

The measures of performance are the design and plan products: conceptual, preliminary and final designs; implementation and monitoring plans.

4. Cost/Benefit Comments. Is the budget reasonable and adequate for the work proposed?

If a more innovative and insightful restoration design were being proposed the budget would seem adequate. However, the budget should be expanded to include some baseline monitoring to supplement the basis of design.

5. **Regional Review.** How did the regional panel(s) rank the proposal (High, Medium, Low)? Did the regional panel(s) identify significant benefits (regional priorities, linkages with other activities, local involvement) or impediments (local constraints, conflicts with other activities, lack of local involvement) to this proposal? What were they?

The Sacramento Regional Review was high. Concerns were expressed about the watershed setting.

6. <u>Administrative Review.</u> Were there significant concerns about the proposal with regard to the prior performance, environmental compliance and budget administrative reviews? What were they?

No performance issues were raised. The proposed work will require a land use lease from the State Lands Commission.

Miscellaneous	comments:
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None

Sacramento Regional Review:

Proposal Number: 50

Applicant Organization: Cottonwood Creek Watershed Group

Proposal Title: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project

Development

Overall Ranking: -Low -Medium XHigh

Provide a brief summary explanation of the committee's ranking:

Overall support for this watershed group and this type of demonstration project. There were some questions about the timing for this proposal; it could be submitted in a few years and still be applicable.

1. Is the project feasible based on local constraints?

XYes -No

How?

This project is feasible, yet it is extremely expensive and does NOT include any actual project construction (more below). In terms of local constraints, the watershed group is functioning well and should be able to effectively communicate the results of this demonstration project. Reviewers were impressed that not only were the affected landowners contacted, a letter of support was included.

2. Does the project pursue the restoration priorities applicable to the region as outlined in the PSP?

XYes -No

How?

ERP goals 1,2,3 and Restoration Priorities 3 and 7.

3. Is the project adequately linked with other restoration activities in the region, such as ongoing implementation projects and regional planning efforts?

XYes -No

How?

Yes, this project is linked to other restoration activities. Reviewers were concerned about how this demonstration project could fit in with the overall geomorphic concerns for the watershed. The proposal cites that this proposal is submitted under the assumption that restoration of the Cottonwood Creek channel, natural geomorphic functions, flows, and aquatic and riparian habitats will significantly contribute to restoration of the native fisheries. This assumption is not proven.

4.	Does the	project ad	equately in	volve local	people and	l institutions?

How?

XYes -No

Yes, this project adequately involves local people; it will be helpful for the local people to learn more about natural stream processes.

Other Comments:

This is a well-written proposal. In terms of timeliness though, the work described in this proposal could wait for a few years and still be applicable.

External Scientific: #1

Research and Restoration External Scientific Review Form

Proposal Number: 50

Applicant Organization: Cottonwood Creek Watershed Group

Proposal Title: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project

Development

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

None

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects; **Good:** quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	The proposal express little understanding of the pre-disturbed stream reaches
-Good	nor does it clearly lay out the goals, objectives and hypotheses of the restoration
XPoor	effort. It reads like an engineering "quick fix".

1. <u>Goals.</u> Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

The project goals and objectives are not clearly stated. Although the project type is given as "Implementation Pilot", it is really a design effort. Implementation is not included. The objectives are "...to develop two demonstration projects...". No attempt is made enter hypotheses or how they might be tested.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

The project is justified by reference to CALFED's strategic plan. The authors seem not to have extensive knowledge of Cottonwood Creek or the need for restoration. The proposed two restoration sites seem reasonable. Since the project is design only, the scale of the project is okay.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The proposed restoration techniques are standard, if not ineffective, practices. Nothing new is likely to come from this effort. The design tools, which are proposed, are appropriate but will be used to evaluate restoration techniques that do not meet the need.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

The design effort is feasible. The resulting restoration will have a high probability of failure. The identified restoration techniques focus on stabilizing the stream banks and ignores grade control. No attempt is being made to understand the geomorphology of the project areas or the origin of the stream channel. Willow plantings will not accomplish what the authors intend: more natural hydrology and better wildlife habitat.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

The measures of performance are the design and plan products: conceptual, preliminary and final designs; implementation and monitoring plans. The success of the project might be measured by the quality and timeliness of these products. The success of the restoration will depend on the means of implementation. This proposal seems not to be headed in the right direction.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

The products are discussed above.

7. <u>Capabilities.</u> What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

While the individuals and organizations seem qualified to undertake the work, the proposed restoration concepts will not lead to effectiveness and efficiency.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

If a more innovative and insightful restoration design were being proposed the budget would seem adequate. However, the budget should be expanded to include some baseline monitoring to supplement the basis of design.

Miscellaneous comments:

External Scientific: #2

Research and Restoration External Scientific Review Form

Proposal Number: 50

Applicant Organization: Cottonwood Creek Watershed Group

Proposal Title: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project

Development

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

None

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects; **Good:** quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	The requested funds are to be used to develop a restoration plan, not execute the plan. The process described to develop the plan involves stakeholders, meetings,
-Good	discussions and the like. These steps are common when developing plans and therefore not unique or novel. No monitoring ideas are mentioned, even though
X Poor	many projects of this type have been completed and monitored in the past. No matching funds are pledged.

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

The goals are not internally consistent. The goal seems to be to protect the streambank at two locations. Landowners have been identified who are willing participants, inferring that they have streambank erosion problems. The project will then encourage natural processes including channel braiding, meandering, and bank overhanging. This is NOT consistent with streambank protection. As a matter of fact and experience, protecting a streambank at a few isolated points generally deflects flow towards opposite banks where flow attacks unprotected banks. The ensuing instability often unravels the entire reach, eroding the protected banks from behind.

The objective is not clear. It includes establish a single channel in dynamic equilibrium, but the present state of the stream channel is not discussed.

2. <u>Justification</u>. Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

There is no connection made between restoring the channel configuration in two locations and the overly optimistic presumed results: stream meanders, restored floodplains, habitat, flow and temperature, and gravel and sediment transport and deposition. The proposers so state by saying, assuming that these conditions and processes are restored to a more natural state The remaining portion of the justification section cites the need for restoration and support for it from the stewardship agencies in the area. While such support is true, too much is expected from the tasks identified for this project.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The approach is not well defined; one purpose of the project is to fund the design. The idea mentioned in the proposal (root wads and willow shoots) is not innovative or new. Many published reports already exist explaining installation, care, and impacts of such streambank stabilization techniques. Results, therefore, are not likely to add to the base of knowledge. In light of the body of knowledge already available from similar projects, the information generated by the project will be no more useful to decision-makers that currently available information.

Additionally, it does not seem realistic to carry the project through installation in one year.

4. <u>Feasibility.</u> Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

The approach as presented appears to be feasible and relatively straightforward. The likelihood of successfully protecting two streambank locations is very high. The likelihood that such protection will have all of the ancillary benefits hoped for is low. The scale of the desired outcome is much larger than the scope of the project.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

There is no monitoring plan proposed. Developing the monitoring plan is to be part of the funded project. It is impossible, therefore, to assess adequacy. The proposers certainly could have identified the common monitoring steps taken when root wads and willow shoots are used to protect streambanks, but no mention is made. The assembled team to perform the work should have been capable of discussing at least probable monitoring steps.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

Products include a Conceptual Design Report, Preliminary Design Report, NEPA/CEQA document, Final Design and Construction Bid Package, and a Monitoring Plan. Monitoring will not begin until the project is over.

7. <u>Capabilities.</u> What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

The project team appears to be fully capable and qualified to do the work. One would have expected monitoring suggestions from the team given their expertise and experience.

8. Cost/Benefit Comments. Is the budget reasonable and adequate for the work proposed?

The project budget (\$384 K) appears excessive for developing a plan to protect the streambank at two locations, which is the only specific action promised for the project.

Miscellaneous comments:

External Scientific: #3

Research and Restoration External Scientific Review Form

Proposal Number: 50

Applicant Organization: Cottonwood Creek Watershed Group

Proposal Title: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project

Development

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

none

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects; **Good:** quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	Not enough detail provided on potential designs and monitoring approaches.
-Good	Hence impossible to evaluate the approach and feasibility. Cost is extremely
XPoor	high for design phase.

1. <u>Goals.</u> Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

Goals and objectives are clearly stated and consistent with the central hypothesis that restoring the main stream channel to a more natural configuration would contribute to a number of morphological improvements (e.g. floodplain interaction, meander), ultimately improving riparian and fish habitat.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

The justification for the project is grounded in the context of the dynamic equilibrium conceptual model and CALFED objectives

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The approach that is outlined is quite vague. Six tasks are identified, but there is little information to evaluate whether the approaches used to design and monitor the restoration project will be effective. The proponents cite the name of the manual they will use to guide project design, but they do not even allude to the types of techniques that may be employed (e.g. LWD additions, deflectors?). All that is provided is a motherhood type statement that: "they will restore the streambed to a single "natural" channel in equilibrium".

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

The general steps in the approach are documented, but the proposal is very weak on details. Even though this is a design project, the proponents need to give us some sense of what the projects would likely entail, so we can assess its feasibility. Without this information we also cannot assess the tools they propose to use to design the project.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

PM specification is not very applicable for a design project. However their brief mention of the PM's they eventually propose to develop as part of the monitoring program are only focused on physical metrics. Since the ultimate goal of the project is to restore fish habitat to the benefit of fish populations, shouldn't the PM's focus on fish habitat and population-level responses?

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

The products from this exercise will be useful/required for the implementation of a restoration project in future phases.

7. <u>Capabilities.</u> What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

As the proponents have been involved in watershed assessment activities in Cottonwood Ck for some time, the lack of detail on potential restoration designs is surprising. The project team appears qualified based on their bio's.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

Frankly, considering this is only a design phase, a cost of approximately \$385,000 is outrageous. Most of this is consultants fees which average over \$600/day up to a maximum of \$1350/day. Hence the large cost. Unfortunately, there is no specification about how many hours will be billed for each task, just round figures (e.g. \$80,000 for final design). The overall large cost, high daily rates, and lack of detail on the budget is concerning.

Miscellaneous comments:

Prior Performance/Next Phase Funding:

New Proposal Number: 50

New Proposal Title: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project Development

1. Prior CALFED project numbers, titles, and programs: (*list only projects for which you are the contract manager*)

98-E05, Cottonwood Creek Watershed Group Formation, 2000-E03, Cottonwood Creek Watershed Monitoring and Assessment Ecosysten Restoration

2. Prior CVPIA project numbers, titles, and programs: (*list only projects for which you are the contract manager*)

N/A

3. Have negotiations about contracts or contact amendments with this applicant proceeded smoothly, without persistent difficulties related to standard contract terms and conditions?

If no, please explain any difficulties:

4. Are the status, progress, and accomplishments of the applicant's current CALFED or CVPIA project(s) accurately stated?

If no, please explain any inaccuracies:

5. Is the applicant's progress towards these project(s)' milestones and outcomes to date satisfactory?

If no, please explain deficiencies:

6. Is the applicant's reporting, records keeping, and financial management of these projects satisfactory?

If no, please explain deficiencies:

7. Will the project(s) be ready for next phase funding in 2002, based on its current progress and expenditure rates?

If no, please explain:

This is not a next phase project.

Other Comments:

Environmental Compliance:

Proposal Number: 50
Applicant Organization: Cottonwood Creek Watershed Group
Proposal Title: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project Development
1. Are the legal or regulatory issues that affect the proposal identified adequately in the proposal?
-Yes XNo
If no, please explain:
State Lands Commission land use lease required.
2. Does the project's timeline and budget reflect adequate planning to address legal and regulatory issues that affect the proposal?
XYes -No
If no, please explain:
3. Do the legal and regulatory issues that affect the proposal significantly impair the project's feasibility?
-Yes XNo
If yes, please explain:
Other Comments:

Budget:
Proposal Number: 50
Applicant Organization: Cottonwood Creek Watershed Group
Proposal Title: Channel Restoration on Cottonwood Creek, Phase 1, Demonstration Project Development
1. Does the proposal include a detailed budget for each year of requested support?
XYes -No
If no, please explain:
2. Does the proposal include a detailed budget for each task identified?
XYes -No
If no, please explain:
3. Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs?
XYes -No
If no, please explain:
4. Are appropriate project management costs clearly identified?
XYes -No
If no, please explain:
5. Do the total funds requested (Form I, Question 17A) equal the combined total annual costs in the budget summary?
XYes -No
If no, please explain (for example, are costs to be reimbursed by cost share funds included in the budget summary).
6. Does the budget justification adequately explain major expenses?

XYes -No

If no, please explain:

Other Comments:		

7. Are there other budget issues that warrant consideration?

-Yes XNo

If yes, please explain: